

REMARKS

Claims 1, 3 through 12 and 14 through 22 are in the Application and are presented for consideration. By this amendment, changes have been made to independent claims 1 and 12. The changes to claim 1 present the same subject matter as the subject matter now granted in the corresponding European Patent Office proceeding. In particular, claim 1 has now been amended to correspond to granted patent EP-patent 1 617 965 B1. Claim 12 includes features similar to claim 1 and also highlights the movement device providing multiaxial movement and including a control for guided movement of the component along a predetermined, programed and multiple axis movement path for programed orientation and positioning of the component relative to the welding head during welding. Process claim 10 has been amended to include all the features corresponding to the process claim of granted patent EP-patent 1 617 965 B1. Several of the dependent claims have been amended and claims 2 and 13 have been canceled. Further, new claims 21 and 22 have been added to highlight that the multiaxial robot which holds the workpiece/component for guided movement of the component along a predetermined, programed multiple axis movement path during welding, has a gripper for gripping the component.

The drawings have been objected to because they fail to show the robots as mentioned in the abstract. Applicant has now corrected the abstract. In particular, the original abstract has been canceled and a new correct Abstract Of The Disclosure has been added. No new matter has been added. With this amendment, the objection to the drawings is overcome.

Various claims have been objected to under 37 CFR 1.75 as being a substantial

duplicate of another claim. By this amendment, claim 12 has been amended and presents subject matter which is different from claim 1. Accordingly, the similar claims, which depend from claims 1 and 12, are not substantial duplicates based on the independent claim being substantially different. Accordingly, it is believed that this objection has now been overcome.

Claims 5 and 16 have been rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. This rejection is based on the position that the moving unit has not been disclosed.

Claim 5 is directed to the welding head being arranged non-stationarily based on a moving unit. The specification explains this with regard to the embodiment of figure 3 in which a moving means 11 is provided, particularly in the form of a multiaxial welding robot 13. Further, the paragraph [0017] provides a discussion with regard to the scanner feature for controllable deflection of the laser beam. Accordingly, reconsideration of the rejection is requested.

Claims 1,2, 7, 8, 10, 12, 13, 18, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated over Alborante.

The present invention as highlighted in amended claims 1 and 10 and 12 provides movement device for multiaxial movement of workpiece/component along a predetermined, programmed and multiple axis movement path. The controlled movement of the workpiece moves the workpiece during welding with the predetermined programmed path of movement being such that the component is moved so as to move the laser location on the component to provide the weld. This presents a very different approach from the prior art including the

welding techniques taught by Alborante.

Alborante teaches a flexible apparatus for welding different types of motor-vehicle bodies. The bodies are assembled loosely beforehand and are supplied to a welding station (1) provided with a plurality of locating devices (L) for clamping the component parts of the body in the correct positions for welding and with welding means for welding the component parts of the body together after they have been clamped by the locating devices. The locating devices are stationary for welding. A weld is not formed by moving the workpiece using a locating device. The locating devices (L) are supported by at least two pairs of locating frames (4,5) which are movable along a predetermined path so as to be interchangeable rapidly at the working position in accordance with the type of body located at the welding station to be welded, the locating devices (L) of each pair of locating frames (4,5) being suitable for a respective type of body. During welding, there is no movement of the locating devices (L) of and no movement of the locating frames (4,5). Alborante teaches clamping elements which locate the workpiece for welding and the location is fixed. Different bodies can be moved into this fixed location. There is no movement of the workpiece to achieve the welding and no welding on the fly. Accordingly, Applicant respectfully requests that the rejections based on Alborante be reconsidered. Favorable consideration the claims as now presented is requested.

Applicant notes that claims 8 and 19 as well as 7 and 18 are rejected but the rejection mentions that these claims are obvious in view of the prior art. Applicant requests reconsideration of this rejection as well. According to the invention, the focal length is used as part of the overall control wherein the workpiece is oriented and moved to achieve the weld

based on the particular focal length. In claims 7 and 18, another feature of the invention is highlighted based on focal lengths being used for the predetermined path during the welding process. The controlled movement of the workpiece during welding involves a predetermined programmed path of movement with this movement be multiaxial. These claimed features in combination with the features of claims 7, 8, 18 and 19 are significant with regard to the movement of the workpiece based on the focal length of the laser beam. This combination of features is neither taught nor suggested by Alborante and is not obvious in view of Alborante. Accordingly, is requested that this rejection be reconsidered as well.

Claims 3-5,11, and 14-16 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Alborante in view of Sciaky et al (US 4654505).

The rejection is based on the position that Alborante teaches the features of the base claims 1, 10 and 12 and that Sciaky et al teaches features of the mentioned dependent claims, including features relating to use of a multiaxial robot. As noted above, the prior art as a whole including Alborante fails to teach and fails to suggest a laser head in combination with a moving device for the component wherein the moving device provides guided movement of the component along a predetermined, programed and multiple axis movement path for programed orientation and positioning of the component relative to the welding head during welding. Sciaky et al. also fails to teach a multiaxial moving device for moving the component as claimed. According to Sciaky et al. the workpieces are positioned for welding with the workpieces being welded in a positioned and gripped state. Accordingly, the prior art as a whole fails to teach and fails to suggest the crux of the invention. The cited prior art does not

establish a prima facie case of obviousness. Accordingly, reconsideration the rejection is requested.

Claims 6,9,17 and 20 have been rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Alborante reference in view of Maruyama et al (US 6072149), hereinafter Maruyama.

The rejection is based on the position that Alborante teaches the features of the base claims 1, 10 and 12 and that Maruyama teaches features of the referenced dependent claims including features relating to controllable deflection of the laser beam. As noted above, the prior art as a whole including Alborante fails to teach and fails to suggest a laser head in combination with a moving device for the component wherein the moving device provides guided movement of the component along a predetermined, programed and multiple axis movement path for programed orientation and positioning of the component relative to said welding head during welding. Maruyama presents teachings relating to controlling the position of the laser beam. This is one aspect of Applicant's invention, that the device and process can be provided either with a stationary welding head, or a moving welding head or with a stationary welding head and a deflected beam. These are three variations which work in each case with the moving device which moves the actual work piece components by changing the orientation and moving the workpiece through a multiaxial path. The prior art including Maruyama fails to teach and fails to suggest the basic features of the invention. The cited prior art does not establish a prima facie case of obviousness. Accordingly, reconsideration the rejection is requested.

Applicant respectfully requests reconsideration of the outstanding rejections in view of the amended claims and in view of discussion above. Further and favorable action on the merits is requested.

Respectfully submitted
for Applicant,



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